

**REMARKS/ARGUMENTS**

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested.

Claims 9, 13 and 14 are pending in the present application. Claim 10 has been canceled without prejudice or disclaimer, Claim 9 has been amended, and Claims 13 and 14 have been added by the present amendment without an introduction of any new matter.

In the outstanding Office Action, Claims 9 and 10 were rejected under 35 U.S.C. § 102(e) as anticipated by Martynov (U.S. Patent 6,229,600, herein "Martynov").

Claim 9 has been amended and finds support at page 26, lines 4-9, for example. No new matter is added.

Claim 9 stands rejected under 35 U.S.C. § 102(e) as anticipated by Martynov. This rejection is respectfully traversed.

Amended Claim 9 is directed to an aberration state detection apparatus that includes a light sending system that focuses light from a light source onto a recording surface of an information medium, wherein an optical aberration is given to the light. The detection apparatus also includes a detection optical system that detects light from the information medium, and a detector that detects a state of occurrence of the optical aberration of the light, focused on the recording surface of the information medium by the light sending system, from a detection result obtained by the detection optical system.

Martynov discloses a spherical aberration detection system that includes a beam splitter 59 having inner parts 62, 63 and outer parts 64, 65. The inner parts 62, 63 deflect paraxial rays towards split detectors having sub-detectors 66, 67 and 68, 69, respectively. The outer parts 64, 65 deflect marginal rays towards split detectors having sub-detectors 66', 67' and 68', 69', respectively. A signal processor forms a focus error signal  $S_{FE}$  using the detector output signals S66 to S69, a focus error signal  $S_{FE}'$  using the detector output signals

S66' to S69' and a spherical aberration signal  $S_{SA}$  by subtracting  $S_{FE}'$  from  $S_{FE}$  (see column 5, line 29 to, column 6, line 12 and Figures 5a and 5b). Thus, a spherical aberration of a beam is determined from a spherical aberration signal  $S_{SA}$  (see column 4, lines 42-46). Further, Martynov discloses that the spherical aberration detection system can be used in optical players such as disclosed in Figure 6 (see column 6, lines 22-25). The signal processor 107 forms a spherical aberration signal  $S_{SA}$  and a spherical aberration of a radiation beam is determined similarly as discussed above (column 7, lines 1-20). However, Martynov does not disclose or suggest that an optical aberration (e.g., wavefront aberration, and spherical aberration) is given to light focused on a surface of an information medium, and that a state of occurrence of the optical aberration is detected from light reflected from the surface of the information medium, as performed by the aberration state detection apparatus recited in amended Claim 9.

Accordingly, it is respectfully submitted that independent Claim 9 is allowable.

New Claims 13 and 14 are submitted herewith. New Claims 13 and 14 find support at page 100, line 19 to, page 102, line 25 of the specification, at page 101, lines 8-19 of the specification, and Figure 6, for example. No new matter is added. Further, it is respectfully submitted that Martynov does not disclose or suggest the features recited in Claims 13 and 14.

Accordingly, Claims 13 and 14 are also believed to be allowable.

Consequently, in light of the above discussion, and in view of the present amendment, the present application is believed to be in condition for allowance. An early and favorable action to that effect is earnestly solicited.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,  
MAIER & NEUSTADT, P.C.



---

Eckhard H. Kuesters  
Attorney of Record  
Registration No. 28,870

Customer Number

**22850**

Tel: (703) 413-3000  
Fax: (703) 413 -2220  
(OSMMN 08/03)

EHK/GS:fm

I:\ATTY\GS\20s\204567\AME 2.DOC